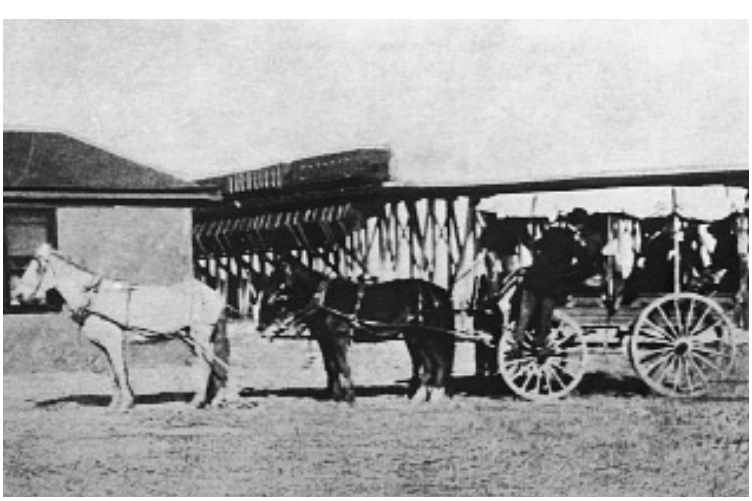
Terry E. Maze

Petrified Wood and Railroads

While I am writing, I want to say a word to you in regard to the Petrified Forest. When we went to the Petrified Forest from Santa Fe and left the train at Adamana, there was only one other person stopped off there to see the Petrified Forest…. As I consider it one of the most marvelous things I have ever seen and am thoroughly enthusiastic over it, I am spending a good deal of time in telling all my friends about it….

Excerpt from a letter written by Dr. G. C. G. Watkins, 1929.

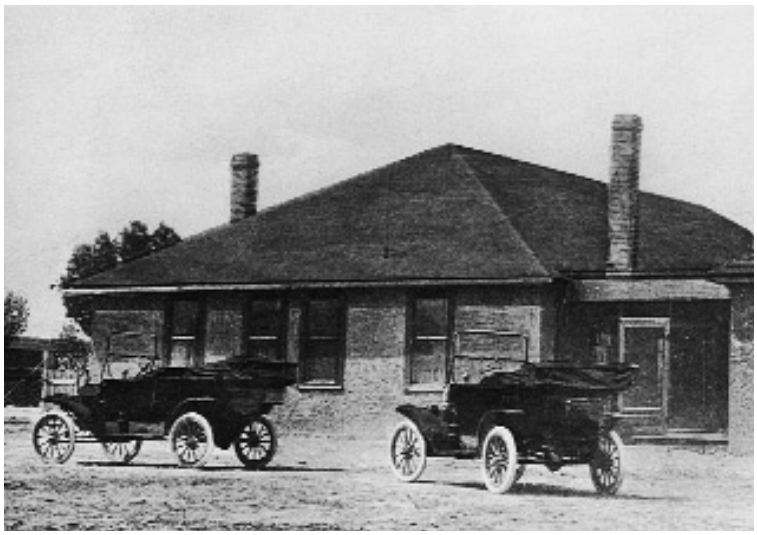
Because of Dr. Watkins's letter, Hunter Clarkson, director of the Santa Fe Railway auto tours, scheduled trips to the Petrified Forest and Painted Desert in Arizona. These tours would never rival other auto tours of the Southwest and signaled the beginning of the end of the 50-year relationship between petrified wood and the railway company. This connection began in the 1850s when surveys along the 35th parallel for a railroad were undertaken. Whipple's survey, in 1853, brought public awareness of the existence and uniqueness of petrified wood. Further development of a railroad would wait until after the Civil War, when the Atlantic and Pacific Railroad Company (later part of the Atchison, Topeka and Santa Fe Railroad) was chartered to build along the earlier survey lines. By the early 1880s, tracks had been laid from Albuquerque west, reaching the area of the petrified wood deposits east of Holbrook, Arizona.



Stagecoach departing Adamana, Arizona, for the Petrified Forest, 1925.

Completion of the railroad allowed scientists and visitors access to this wood turned to stone. Scientists would examine specimens and write reports, visitors would take home samples to show to their friends. More and more scientists and visitors would come. In the early years they mostly arrived by train, getting off at Adamana or Billings, Arizona, two Arizona whistle stops on the railroad. Often renting a horse from Adam Hanna, who had a ranch near the railroad, they would ride north to the Black Forest in the Painted Desert, or south to Chalcedony Park, as the Petrified Forest was then sometimes called. But these "forests" and "parks" had few living trees. Scattered on the ground, instead, were concentrations of petrified wood pieces, creating a natural carpet. In 1891, Charles L. Lummis wrote that, from the railroad, "…one soon reaches the northern edge of the forest, which covers hundreds of square miles…you seem to stand on the glass of a gigantic kaleidoscope, over whose sparkling surface, the sun, breaks in infinite rainbows…." Descriptions like this soon began attracting more scientists, curiosity seekers, vandals, and businessmen. The railroad had given these people easier access to the fossil logs. In search of quartz and amethyst crystals, eastern jewelers hired men to dynamite the logs while others made petrified wood popular for home decorations, paperweights, etc. Loads of petrified wood were shipped by rail to the West Coast and the Midwest for cutting, polishing, and sale. When it became obvious that cutting petrified wood was akin to cutting peanut brittle without shattering it, the market dropped. However, one company planned to erect a stamp mill to crush the petrified wood into industrial abrasives.

By this time, Arizonans living near Chalcedony Park were becoming more concerned about the destruction of the fossil forests. A resolution passed by the Arizona Territorial Legislature in 1895 caused two townships containing petrified wood to be withdrawn from settlement. The railroad continued bringing scientists and visitors to the area, while commercial



Campbell's Hotel in Adamana, Arizona served patrons of the Atchison, Topeka and Santa Fe Railroad. The proprietor was also custodian of the monument from 1912-1918.

Photos courtesy Petrified Forest National Park.

interests attempted to find a way to mine the petrified wood and ship it out by rail. By 1899, the amount of petrified wood being shipped had dropped; however, without protection, visitors, vandals, and businesses would continue the ever-increasing destruction of the forests. The railroad had been a mixed blessing. It allowed scientists access to study the wood but also permitted others to carry off whatever they could manage. Increased efforts at preservation resulted in 95 square miles containing petrified wood sites being set aside in 1906 as a national monument. President Theodore Roosevelt, using the authority recently granted him in the Antiquities Act, created a Petrified Forest National Monument deemed worthy for its "scientific interest."

The result was more and more visitors arriving by train (and later car). A hotel opened in Adamana, the stop closest to the monument, to serve the train passengers who disembarked there. Following a tour of the national monument, they boarded the next train heading toward their destination. Eager to build on the increased leisure time of American families in the 1890s and early 1900s, the Santa Fe Railway began actively promoting Western wonders. Paintings of the Petrified Forest and other natural wonders decorated their stations and business offices. People could now visit the places seen previously only in paintings or photographs

An alliance, of sorts, between business and preservationists resulted. Railroads wanted to protect the scenic attractions for their customers while preservationists wanted to protect the same areas for future generations. For Petrified Forest National Monument, the Santa Fe advertised "stop-overs" where tourists could get off at Adamana, take a leisure tour to the nearby forest, and return at dusk. Those with more time could stay over and visit the forests farther south or those outside the boundaries of the national monument. Back on the next train, they traveled to the next scenic attraction in the Southwest.

The proximity of the railroad and Adamana to the petrified wood sites guaranteed this increase in visitors. With it came a growing problem that continues to this day. By 1907, between 1,500 and 2,000 people visited the area annually, with each person allowed to carry away about eight pounds of specimens as souvenirs. Through its initial advertising, the Santa Fe Railway added to the problem by inviting visitors to help themselves. Protest from the General Land Office resulted in a change to the brochure warning of the consequences of removing a protected resource.

After World War I, the increase in accessibility by private vehicles brought a decline in train passengers. However, the hotel at Adamana was modernized and a fleet of vehicles now transported guests to various petrified wood sites. In 1926, the highway just north of Adamana was officially designated U.S. Route 66. Nearly all visitors entered the national monument via Adamana with many, after fording the treacherous Puerco River, venturing only to First Forest. Despite more visitors enjoying the Southwest by auto, in 1925 the Santa Fe Railroad and the Fred Harvey Company initiated their Southwest "Indian Detours." Tourists would travel by train to certain stops, spend one or more days visiting several area attractions, return to a train and go on to another stop. In 1930, the first tan and brown Packard "Harveycar" delivered a single California tourist to the Petrified Forest. Those who followed would be treated to views of the Painted Desert and the Petrified Forest. After enjoying a basket lunch, they would later dine at Harvey's La Posada, Winslow, or another of the Harvey inns along the railroad. Among those arriving by train were Albert Einstein and his wife. He was so fascinated by the petrified wood that the railroad officials had trouble getting the Einsteins back to the train on time. The tours to the Petrified Forest were never profitable, however, and within a few years were dropped altogether.

In the 1920s, the Stone Tree Inn was built along Route 66, overlooking the Painted Desert. Builder Herbert D. Lore purchased several sec-

tions from the Santa Fe Railway Company. The competition between Adamana and this new business resulted in a portion of the vast Painted Desert being added to Petrified Forest National Monument in 1932. (The monument became a national park in 1962.) The railroad's interest in providing stopovers further diminished.

By the time of America's involvement in World War II, the train did not stop near the monument at all. Fewer and fewer people rode the train and, after 70 years of involvement with petrified wood, the railroad quietly ended its connection. Adamana soon became a place of vanished memories of wagonloads of petrified wood, famous people like John Muir and Albert Einstein, scientists abuzz over natural curiosities, visitors struggling with bags of petrified wood, and lost cars in the quicksands of the Puerco River.

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Copper Mining, Railroads, and the "Hellhole of Arizona"

For almost 30 years, various individuals and companies attempted a series of unsuccessful mining ventures in the Silver Bell Mining District, located 35 miles northwest of Tucson, Arizona. In 1903, however, William F. Staunton, E. B. Gage, and Frank M. Murphy played an important role in the ultimate development of the district through their formation of the Imperial Copper Company, a subsidiary of the Development Company of America, headquartered in Tombstone. The Imperial Copper Company was incorporated on May 15, 1903, and soon began systematic mining and development of its property. On January 20, 1904, incorporation papers were filed for the Arizona Southern Railroad Company, with all stock held by the Imperial Copper Company.[1] Although the actual date of completion is unknown, the railroad began operations on September 10, 1904, and by the end of the month had assisted in transporting several thousand tons of ore to the Copper Queen smelter at Douglas, Arizona.

The Arizona Southern Railroad initially was constructed to more efficiently and economically move the mined copper and silver ore to Douglas for reduction. By 1907, however, there was sufficient ore being produced that, to save expenses, the Imperial Copper Company constructed a smelter about 15 miles northeast of Silverbell under its affiliate, the Southern Arizona Smelting Company, for which the town of Sasco was named.

In 1905, two years after the Silverbell mining camp was established by the Imperial Copper Company, the camp's population had increased to 1,000 residents. By 1910, Silverbell was a booming town, with a population of 1,118 residents.[2] The Imperial Copper Company continued to be the primary mining operation in the Silver Bell Mining District until 1911, when the company went bankrupt and sold its holdings to the American Smelting and Refining Company, known today as ASARCO, Incorporated.

After the 1912-1915 copper depression, Asarco began developing its holdings in the dis-